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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,160	11/25/2003	Takayoshi Endo	032115	4148

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EXAMINER

NGUYEN, PHUONGCHI T

ART UNIT

PAPER NUMBER

2833

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/720,160

Applicant(s)

ENDO ET AL.

Examiner

Phuongchi Nguyen

Art Unit

2833

-- Th MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4 and 5 is/are rejected.
- 7) ☒ Claim(s) 3 and 6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koide (US6554644B2) in view of Yamaguchi (US5975950).

In regarding to claim 1, Koide discloses (figures 2 and 6) a connector comprising a central contact (11), an insulating housing (13) having a contact inserting hole (26) for press-fit therein of the central contact (11), and an external contact (12) adapted to engage with the insulating housing (13) by insertion therein of the insulating housing (13) with the central contact (11) press-fitted therein, the insulating housing (13) being formed in a generally rectangular shape. Koide lacks a cantilevered retaining beam, an engaging hole corresponding to a retaining pawl and the cylindrical shape housing. However, Yamaguchi teaches an engaging hole (of 3, adjacent to 4, where 13a located) (figure 5A) is formed in a (top) side wall of the central contact (3), a cantilevered retaining beam (13) is formed on a side wall of the insulating housing (7), the retaining beam (13) being pressed by the external contact (16) and moving toward the contact inserting hole (where 5a located) upon insertion of the insulating housing (7) into the external contact (16), and a retaining pawl (13a) is formed in part of the retaining beam (13) so as to engage with the engaging hole (of 3, adjacent to 4, where 13a located) (figure 5B) upon movement of the retaining beam (13) toward the contact inserting hole (where 5a located). It would have been obvious to one having ordinary skill at the time the invention was made to modify the connector of Koide by providing a cantilevered retaining beam, the retaining pawl as

Art Unit: 2833

taught by Yamaguchi for locking the housing to the central contact and change the rectangular shape of the housing to be a cylindrical shape; since such a modification would have involved a mere change in the shape of a component. A change in shape is generally recognized as being within the level of ordinary skill in the art See *Graham v. John Deere Co.*, 383 U.S. 148 USPQ 459.

In regarding to claim 2, Koide discloses the invention, but lacks a second retaining beam, a second engaging hole corresponding to the second retaining pawls. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the connector of Koide by adding a second retaining beam, a second engaging hole corresponding to the second retaining pawls as taught by Yamaguchi for secure the central contact to the housing on both sides; since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

In regarding to claims 4 and 5, Koide discloses the connector according to claim 1, wherein a engaging lance (27) are formed by cutting side wall portion (20) of the external contact (12) and raising the cut portions, and a stepped portion (28) are formed on the side wall of the insulating housing (13), the engaging stepped portion (28) coming into engagement with the engaging lance (27) when the insulating housing (13) is inserted into the external contact (12). Koide lacks a second engaging lance corresponding to a second engaging stepped portion. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the connector of Koide by adding a second engaging lance corresponding to a second engaging stepped portion on the other side wall for secure the external contact to the housing on both sides; since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Art Unit: 2833

Allowable Subject Matter

3. Claims 3 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter: none of prior art teaches or suggests the connector having the arrangement of a rectangular parallelepiped elongated engaging rib, the pair of retaining beams, an engaging notch and the retaining projections as claimed.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuongchi Nguyen whose telephone number is (571) 272-2012. The examiner can normally be reached on 8:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on (571) 272-2800 ext 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PCN

May 11, 2004


ROSS GUSHI
PRIMARY EXAMINER